



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,917	07/15/2003	Christopher J. Allen	10761.1457	7149
81331 7590 09/29/2010 Accenture/Finnegan, Henderson, Farabow, Garrett & Dunner, LLP 901 New York Avenue Washington, DC 20001-4413				
EXAMINER				
STACE, BRENT S				
ART UNIT		PAPER NUMBER		
2161				
NOTIFICATION DATE		DELIVERY MODE		
09/20/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

betty.finley@finnegan.com  
dianna.williams@finnegan.com  
catherine.vanhouten@finnegan.com

### Office Action Summary

**Application No.**

10/619,917

**Applicant(s)**

ALLEN ET AL.

**Examiner**

BRENT STACE

**Art Unit**

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2010.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-33 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 31 July 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/22)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Remarks***

1. This communication is responsive to the amendment filed June 3<sup>rd</sup>, 2010. Claims 1-33 are pending. In the amendment filed June 3<sup>rd</sup>, 2010, Claims 1, 8, 12, 19, 23, and 30 are amended and Claims 1, 8, 12, 19, 23, and 30 are independent Claims.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/3/10 has been entered.

### ***Claim Interpretation***

3. Claims 1-11 are methods including a database. In light of the specification it is improper to consider these claims as not being inherently tied to another statutory class of invention (e.g. computer). As such, Claims 1-11 are currently statutory under 35 U.S.C. 101.
4. Claims 12-22 recite "a computer-implemented system" with limitations that explicitly use the computer system (e.g. "a skill-impacting system, the skill-impacting

system storing, using a computer system, skill data..."). This system is interpreted as having software and hardware elements (e.g. computer) and cannot be reasonably interpreted as being merely software per se. As such, the claims are currently considered statutory under 35 U.S.C. 101.

5. Claims 23-33 recite "a computer program stored on a computer readable medium." The specification does not include examples on what a computer readable medium includes. The computer readable medium is interpreted to be a statutory form of computer readable medium (RAM, hard drive, CD-ROM, etc.) since a non-statutory form of computer readable medium (e.g. signals) cannot be reasonably interpreted as *storing* a computer program. As such, the claims are currently considered statutory under 35 U.S.C. 101.

### ***Response to Arguments***

6. Applicant's arguments filed June 3<sup>rd</sup>, 2010 with respect to Claims 1-33 have been fully considered but they are not persuasive. See below for a detailed response.

7. Applicant's argue that allegedly a prima facie case of obviousness has not been established because the office action "has neither properly determined the scope of the content of the prior art nor properly ascertained the differences between the claimed invention as amended." Since the amended claims are rejected below showing the scope of the content of the prior art where the differences between the claimed invention and prior arts have been ascertained, this argument is moot. See below.

8. With respect to the applicant's argument with respect to exemplary Claim 1 (including Claims 8, 12, 19, 23, and 30) that the prior art(s) allegedly do not teach **"selectively synchronizing, using a computer system, routing logic of a routing system... wherein the synchronizing is conditional, rule-based and independent of the updating,"** the examiner respectfully disagrees. From McFarlane (e.g. front cover figure), it should be clear that McFarlane is on at least a computer, thus, the synchronizing uses a computer system. The claim selectively synchronizes routing logic of a routing system. Routing logic is defined on p. 5 of the specification as being rules and/or source data. Source data is defined in Claim 2 as being agent availability and the skill-based information. As such, synchronization requires updating agent availability and skill based information. In the citations below (e.g. Shaffer, Fig. 4) Shaffer is seen as teaching this. Shaffer has a step for updating skill data in a resume/profile (step 220), and then redefine queues and agent groups based on this updating (Shaffer, Fig. 4 with Shaffer, col. 6, lines 4-15). Redefining queues updates agent availability and redefining agent groups updates agent skill-based information (groups based on skill and availability (agent groups defined in Shaffer, col. 5, lines 36-40)). As seen from the two separate steps in Shaffer, the updating of the agent skills in the skills database is separate/independent from the synchronization (updating) of routing logic. This is selective synchronization since the synchronization occurs on a per agent basis (e.g. when an agent skill changes (e.g. from completing training, etc.)) (the selected agent is updated). When an agent skill changes is seen as being a condition for the synchronization. The synchronizing is rule-based in that once training data (skills) is

updated for the agent (a rule) the system synchronizes the routing system (like a workflow process in Fig. 4) to redefine queues and agent groups to include the agent who just finished appropriate training for the agent group. As such, "selectively synchronizing, using a computer system, routing logic of a routing system... wherein the synchronizing is rule-based and independent of the updating" appears to be taught by the prior art(s) as seen below.

9. The other claims argued merely because of a dependency on a previously argued claim(s) or because they are substantially the same as a previously argued claim(s) in the arguments presented to the examiner, filed June 3<sup>rd</sup>, 2010, are moot in view of the examiner's interpretation of the claims and art and are still considered rejected based on their respective rejections from a prior Office action (part(s) of recited again below).

### ***Response to Amendment***

#### ***Specification***

10. The amendment filed June 3<sup>rd</sup>, 2010 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: a workflow is a set of actions triggered by the fulfillment of a set of conditions described in a policy. The specification previously described a workflow as merely being a "state table." Clearly a state table is different from "a set of actions triggered by the fulfillment of a set of

conditions described in a policy.” The examiner found no other mentions in the specification dealing with a definition of “workflow.”

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

11. In light of the applicant’s respective arguments or respective amendments, the previous 35 USC § 112 rejections to the claims have been withdrawn. Applicant’s showed support for the synchronization being rule-based in paragraph [0010] where the synchronization may occur at a predetermined interval.

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

14. Claims 1-5, 7-16, 18-27, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,038 (McFarlane et al.) in view of U.S. Patent No. 6,128,380 (Shaffer et al.), further in view of U.S. Patent No. 5,633,924 (Kaish et al.).

For **Claim 1**, McFarlane teaches: "A computer-implemented method of maintaining skills for agents of a contact center, [McFarlane, col. 4, lines 11-28, call center agents with acquired skills] the method comprising:

- providing profiles in a central skill database for a plurality of agents [McFarlane, col. 4, lines 7-28 with McFarlane, Fig. 6, Fig. 6 is a table of the agent skills maintained in a database. The database is pictured in Fig. 1. The skills associated with an agent is the claimed profile]
- providing a skill-impacting system, the skill impacting system storing, using a computer system, data for each of the plurality of agents in the central skill database, wherein storing skill data comprises modifying at least one of the profiles, [McFarlane, col. 11, lines 24-39 with McFarlane, col. 12, lines 17-20 with McFarlane, col. 4, lines 13-23 with McFarlane, Fig. 6, Fig. 6 shows the storage of data for each agent in the database with skills getting updated in the other citings] wherein the skill impacting system includes ..., a customer satisfaction scoring system, an a performance metrics scoring system, and wherein the skill data includes satisfaction assessments, ... and performance metrics;



[McFarlane, col. 1, lines 39-42, performance metrics scoring system having performance metrics (e.g. speed of processing request), metrics being a standard unit of measure (which is a score) (basic definition of metric from google/wikipedia) with McFarlane, col. 11, lines 37-54, shows a similar performance metric as above (contact handled within a predetermined time) with "measurable per transaction goals...customer satisfaction." Measuring a customer satisfaction is a customer satisfaction scoring system including satisfaction assessments (assess if the customer was satisfied). "If these goals are consistently met, the agent's skill level is automatically incremented by a predefined amount" shows that the skill impacting system these skill data]

- receiving from the skill-impacting system skill data for a first agent; [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 8-17, ranges of skill from 0-4. Thus, when skill is incremented, it cannot exceed 4. Additionally, skill changes are reported/recorded in an external source. This requires at least a first agent's skill data be received from the skill-impacting system maintaining the skills (in the skills DB)]
- updating, using a computer system, a first profile in the central skill database for the first agent based on the skill data received [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 17-20, ranges of skill from 0-4. Thus, when skill is updated incrementally, it cannot exceed 4. So, when skill changes/updates are recorded, the updating is based on what the previous value was (3→4 is a change but a 4→4 isn't a change and would not be reported)]

- ...such that the routing logic determines which of the plurality of agents are to handle a contact based on at least skill data” [McFarlane, col. 4, lines 40-59, “mapped to a selected agent...as a function of agent skill level, agent availability, customer value, and various other factors”].

McFarlane discloses the above limitations but does not expressly teach:

- “...a learning management educational system...completion or results from a training course
- ...selectively synchronizing, using a computer system, routing logic of a routing system, wherein the routing system comprises a routing database, with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is conditional, rule-based and independent of the updating, and the central skill database is separate from the routing database.”

With respect to Claim 1, an analogous art, Shaffer, teaches:

- “...a learning management educational system...completion or results from a training course [Shaffer, Fig. 4 with Shaffer, cols. 5-6, lines 41-15, determine needed skills, find idle agents, push training to agents, training complete?]
- ...selectively synchronizing, using a computer system, routing logic of a routing system...with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is conditional, rule-based and independent of the updating” [Shaffer, Fig. 4 (specifically, step 220 and 222) with Shaffer, cols. 5-6, lines 41-15, automatically update resume (profile of skill) used in routing system with McFarlane, col. 4, lines 19-23, McFarlane also includes

automatic updating of skills. The synchronizing is conditional and rule-based in that once/if (condition) training data (skills) is updated (a rule) the system synchronizes the routing system to redefine queues and agent groups to include the agent who just finished appropriate training for the group (agent groups are defined on Shaffer, col. 5, lines 36-40). Applicant's specification, p. 5, says that the routing logic can be "rules and/or source data." Steps 220 and 222 of Shaffer, indicate a step of updating the skill profile (resume) and then redefining queues and agent groups, thus the updating of the profile is separate/independent from synchronizing the routing logic/source data (queues) to the (skill/agent) data].

With respect to Claim 1, an analogous art, Kaish, teaches:

- "...wherein the routing system comprises a routing database [Kaish, col. 9, lines 35-39, the database queue (routing database) on a separate computer network node than the routing decision making node]
- "...and the central skill database is separate from the routing database" [Kaish, col. 9, lines 35-39, the database queue (routing database) on a separate computer network node than the routing decision making node].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Shaffer and Kaish with McFarlane because the inventions are directed towards utilizing databases on computers for call processing.

Shaffer's and Kaish's inventions would have been expected to successfully work well with McFarlane's invention because the inventions use databases of agents for call

processing. McFarlane discloses a system for integrating agent database access skills in call center agent assignment applications comprising an agent database and routing calls to the proper agents, however McFarlane does not expressly disclose a learning management educational system...completion or results from a training course or selectively synchronizing routing logic of a routing system, wherein the routing system comprises a routing database, with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is independent of the updating, and the central skill database is separate from the routing database. Shaffer discloses an automatic call distribution and training system (title) comprising a learning management educational system...completion or results from a training course and selectively synchronizing routing logic of a routing system...with skill-based information from the first profile in the central skill database ..., wherein the synchronizing is conditional, rule-based and independent of the updating. Kaish discloses a telecommunication network with integrated network-wide automatic call distribution (title) comprising a routing system with a routing database and the central skill database being separate from the routing database.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the training and synchronization methods from Shaffer and the databases Kaish from and install them into the invention of McFarlane, thereby offering the obvious advantage of automatically providing training to agents based on call queue activity such that agent use and skill can be matched with the statistical demands and needs of the business (Shaffer, col. 3, lines 20-36 (and Shaffer, col. 6, lines 4-22)).

Adding Kaish makes the queue in McFarlane (queue in at least McFarlane, col. 8, lines 24-26) implemented on a different computer database thereby offering the obvious advantage of having a queue that has the widely known characteristic of increased access speed by using a database, and achieving an alternative embodiment by design of Kaish (Kaish, col. 9, lines 31-45). It should be also noted that Shaffer also contains at least a similar queue (Shaffer, Fig. 1 "ACD Queue"). It also should be noted that McFarlane at least appears to make room for an embodiment using many databases in McFarlane, col. 4, lines 45-53.

**Claim 2** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 1, further comprising:

- receiving a contact from a customer; [McFarlane, col. 4, lines 28-33, incoming contact (e.g. call), identifies customers]
- processing routing logic in the routing system to select a second agent from the plurality of agents; [McFarlane, col. 4, lines 39-60, an agent will be selected based on availability. Thus if one agent isn't available another will be selected] and
- routing the contact to the second agent; [McFarlane, col. 4, lines 39-60, "calling party is connected with a selected agent"]
- wherein the routing logic includes routing rules and routing source data for performing the step of routing, [McFarlane, col. 5, lines 49-54, rules based call management with McFarlane, cols. 7-8, lines 20-11, rules engine and rules data section. Source data handled in next limitation] the routing source data including

agent availability and the skill-based information in the routing system" [Shaffer, Fig. 4 with McFarlane, col. 4, lines 39-60, redefining queues and agent groups (step 222) redefines agent availability and the skill-based information (groups defined on skills)].

**Claim 3** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 1, wherein synchronizing the routing system is accomplished for a plurality of profiles in the central skill database" [Shaffer, col. 6, lines 10-18, training agents results in synchronizing a plurality of profiles].

**Claim 4** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 1, wherein updating the first profile is triggered when skill data is received from the skill-impacting system" [McFarlane, col. 11, lines 26-65 with McFarlane, col. 12, lines 17-20, automatically reevaluate and reassign skill levels, update augment (increment) skill level based on change to skill levels (0-4)].

**Claim 5** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 1, wherein synchronizing the routing system is automatically run when triggered by an event" [McFarlane, col. 4, lines 28-60, the event being selecting an agent, select agent from pool of agents. Additionally, agent availability and the skill-based information (groups defined on skills in Shaffer (Fig. 4)) is at least based on current agent availability upon call routing (selection of agent)].

**Claim 7** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 1, wherein the skill data is received from a plurality of skill-impacting systems" [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines

17-20, one system being the supervisor/admin and the other being the "procsee" (which appears to be a typo and is supposed to be a process) engine].

For **Claim 8**, McFarlane teaches:

- ...maintaining a plurality of profiles in a central skill database corresponding to a plurality of agents, [McFarlane, col. 4, lines 7-28 with McFarlane, Fig. 6, Fig. 6 is a table of the agent skills maintained in a database. The database is pictured in Fig. 1. The skills associated with an agent is the claimed profile] wherein the plurality of profiles comprise skill-based ratings for a plurality of skills; [McFarlane, col. 11, lines 22-26 with McFarlane, Fig. 6, various skill ratings per profile in Fig. 6]
- storing, using a computer system, skill data for each of the plurality of agents in the central skill database of at least one skill-impacting system, wherein the step of storing skill data comprises modifying at least one of the plurality of profiles, [McFarlane, col. 11, lines 24-39 with McFarlane, col. 12, lines 17-20 with McFarlane, col. 4, lines 13-23 with McFarlane, Fig. 6, Fig. 6 shows the storage of data for each agent in the database with skills getting updated in the other citations] wherein the skill impacting system includes...a customer satisfaction scoring system, and a performance metrics scoring system, and wherein the skill data includes satisfaction assessments...and performance metrics; [McFarlane, col. 1, lines 39-42, performance metrics scoring system having performance metrics (e.g. speed of processing request), metrics being a standard unit of measure (which is a score) (basic definition of metric from google/wikipedia) with

McFarlane, col. 11, lines 37-54, shows a similar performance metric as above (contact handled within a predetermined time) with "measurable per transaction goals...customer satisfaction." Measuring a customer satisfaction is a customer satisfaction scoring system including satisfaction assessments (assess if the customer was satisfied). "If these goals are consistently met, the agent's skill level is automatically incremented by a predefined amount" shows that the skill impacting system these skill data]

- using the skill data from the at least one skill-impacting system to update, using a computer system, the plurality of profiles in the central skill database; [McFarlane, col. 11, lines 23-55 with McFarlane, col. 12, lines 17-20, ranges of skill from 0-4. Thus, when skill is updated incrementally, it cannot exceed 4. So, when skill changes/updates are recorded, the updating is based on what the previous value was (3→4 is a change by a 4→4 isn't a change and would not be reported (using the skill data from the at least one skill-impacting system))]
- ... wherein the source data is based on agent skills and configures routing logic to make routing decisions" [McFarlane, col. 4, lines 40-59, "mapped to a selected agent...as a function of agent skill level, agent availability, customer value, and various other factors"].

McFarlane discloses the above limitations but does not expressly teach: "A computer-implemented method for synchronizing skill data in a contact center, comprising:



- ...a learning management educational system...completion or results from a training course
- ...maintaining, using a computer system, source data in a routing system for the contact center, wherein the routing system comprises a routing database, and
- ...selectively updating, using a computer system, the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring the routing logic, wherein the updating the source data is conditional, rule-based and independent of updating the plurality of profiles, and wherein the central skill database is separate from the routing database."

With respect to Claim 8, an analogous art, Shaffer, teaches: "A method for synchronizing skill data in a contact center [Shaffer, Fig. 4, updating skills and queues/groups] comprising:

- ...a learning management educational system...completion or results from a training course [Shaffer, Fig. 4 with Shaffer, cols. 5-6, lines 41-15, determine needed skills, find idle agents, push training to agents, training complete?]
- ...maintaining, using a computer system, source data in a routing system for the contact center, [Shaffer, Fig. 4 with McFarlane, col. 4, lines 39-60, redefining queues and agent groups (step 222) redefines agent availability and the skill-based information (groups defined on skills). Agent availability and skill-based information are considered as being source data (as it was in Claim 2 above)]
- ...selectively updating, using a computer system, the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring

the routing logic, wherein the updating the source data is conditional, rule-based and independent of updating the plurality of profiles" [Shaffer, Fig. 4 (specifically, step 220 and 222) with Shaffer, cols. 5-6, lines 41-15, automatically update resume (profile of skill) used in routing system with McFarlane, col. 4, lines 19-23, McFarlane also includes automatic updating of skills. The synchronizing is conditional and rule-based in that once/if (condition) training data (skills) is updated (a rule) the system synchronizes the routing system to redefine queues and agent groups to include the agent who just finished appropriate training for the group (agent groups are defined on Shaffer, col. 5, lines 36-40). Applicant's specification, p. 5, says that the routing logic can be "rules and/or source data." Steps 220 and 222 of Shaffer, indicate a step of updating the skill profile (resume) and then redefining queues and agent groups, thus the updating of the profile is separate/independent from synchronizing the routing logic/source data (queues) to the (skill/agent) data].

With respect to Claim 8, an analogous art, Kaish, teaches:

- "...wherein the routing system comprises a routing database, [Kaish, col. 9, lines 35-39, the database queue (routing database) on a separate computer network node than the routing decision making node] and
- and wherein the central skill database is separate from the routing database" [Kaish, col. 9, lines 35-39, the database queue (routing database) on a separate computer network node than the routing decision making node].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Shaffer and Kaish with McFarlane because the inventions are directed towards utilizing databases on computers for call processing.

Shaffer's and Kaish's inventions would have been expected to successfully work well with McFarlane's invention because the inventions use databases of agents for call processing. McFarlane discloses a system for integrating agent database access skills in call center agent assignment applications comprising an agent database and routing calls to the proper agents, however McFarlane does not expressly disclose synchronizing skill data in a contact center, a learning management educational system...completion or results from a training course, maintaining source data in a routing system for the contact center, selectively updating the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring the routing logic, wherein the updating the source data is independent of updating the plurality of profiles nor a routing system comprising a routing database where the central skill database is separate from the routing database. Shaffer discloses an automatic call distribution and training system comprising synchronizing skill data in a contact center, a learning management educational system...completion or results from a training course, maintaining source data in a routing system for the contact center, and selectively updating the source data based on agent skills with skill-based ratings in the central skill database for reconfiguring the routing logic, wherein the updating the source data is conditional, rule-based and independent of updating the plurality of profiles. Kaish discloses a telecommunication network with integrated network-wide

automatic call distribution (title) comprising a routing system with a routing database and the central skill database being separate from the routing database.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the synchronization methods, training methods, and source data from Shaffer and install them into the invention of McFarlane, thereby offering the obvious advantage of automatically providing training to agents based on call queue activity such that agent use and skill can be matched with the statistical demands and needs of the business (Shaffer, col. 3, lines 20-36 (and Shaffer, col. 6, lines 4-22)). Adding Kaish makes the queue in McFarlane (queue in at least McFarlane, col. 8, lines 24-26) implemented on a different computer database thereby offering the obvious advantage of having a queue that has the widely known characteristic of increased access speed by using a database, and achieving an alternative embodiment by design of Kaish (Kaish, col. 9, lines 31-45). It should be also noted that Shaffer also contains at least a similar queue (Shaffer, Fig. 1 "ACD Queue"). It also should be noted that McFarlane at least appears to make room for an embodiment using many databases in McFarlane, col. 4, lines 45-53.

**Claim 9** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 8, further comprising:

- identifying at least one contact characteristic for a customer; [McFarlane, col. 4, lines 28-45, service needed by the calling party] and

- selecting an agent from the plurality of agents for the customer; [McFarlane, col. 4, lines 39-60, "mapped to a selected agent...as a function of agent skill level, agent availability, customer value, and various other factors"]
- wherein selecting comprises processing the routing logic to consider the skill-based ratings of the plurality of agents in view of the at least one contact characteristic" [McFarlane, col. 4, lines 39-60 mapped to a selected agent...as a function of agent skill level, agent availability, customer value, and various other factors, performing requested function (service required)].

**Claim 10** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 9, wherein selecting further comprises choosing an agent who is a best-fit" [McFarlane, col. 4, lines 51-60 with McFarlane, col. 5, lines 61-65 with McFarlane, col. 8, lines 7-11, "mapped to a selected agent...as a function of agent skill level, agent availability, customer value, and various other factors" with "adapt the operation of the call center 100 to most effectively match the preferences of a calling customer" appears to be a best-fit].

**Claim 11** can be mapped to McFarlane (as modified by Shaffer and Kaish) as follows: "The method from claim 8 wherein maintaining the plurality of profiles is triggered by the occurrence of a skill-changing event indicated by the at least one skill-impacting system" [McFarlane, col. 11, lines 26-65 with McFarlane, col. 12, lines 17-20, automatically reevaluate and reassign skill levels, update augment (increment) skill level based on change to skill levels (0-4)].

**Claims 12-16 and 18** encompass substantially the same scope of the invention as that of Claims 1-5, and 7, respectfully, in addition to a system and some modules for performing the method steps of Claims 1-5, and 7, respectfully. Therefore, Claims 12-16 and 18 are rejected for the same reasons as stated above with respect to Claims 1-5, and 7, respectfully.

**Claims 19-22** encompass substantially the same scope of the invention as that of Claims 8-11, respectfully, in addition to a system and some modules for performing the method steps of Claims 8-11, respectfully. Therefore, Claims 19-22 are rejected for the same reasons as stated above with respect to Claims 8-11, respectfully.

**Claims 23-27 and 29** encompass substantially the same scope of the invention as that of Claims 1-5, and 7, respectfully, in addition to a computer program on a computer readable medium and some code for performing the method steps of Claims 1-5, and 7, respectfully. Therefore, Claims 23-27 and 29 are rejected for the same reasons as stated above with respect to Claims 1-5, and 7, respectfully.

**Claims 30-33** encompass substantially the same scope of the invention as that of Claims 8-11, respectfully, in addition to a computer program on a computer readable medium and some code for performing the method steps of Claims 8-11, respectfully. Therefore, Claims 30-33 are rejected for the same reasons as stated above with respect to Claims 8-11, respectfully.

15. Claims 6, 17, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,453,038 (McFarlane et al.) in view of U.S. Patent No. 6,128,380

(Shaffer et al.) in view of U.S. Patent No. 5,633,924 (Kaish et al.), further in view of U.S. Patent No. 6,901,380 (Bremers).

For **Claim 6**, McFarlane (as modified by Shaffer and Kaish) teaches: "The method from claim 1."

McFarlane (as modified by Shaffer and Kaish) discloses the above limitation but does not explicitly teach:

- "...wherein synchronizing the routing system is automatically run at a predetermined time interval.

With respect to Claim 6, an analogous art, Bremers, teaches:

- "...wherein synchronizing the routing system is automatically run at a predetermined time interval" [Bremers, cols. 15-16, lines 63-8, "responsive to a synchronization event (e.g. triggered by a synchronization schedule...)].

It would have been obvious to one of ordinary skill in the art at the time of invention to combine Bremers with McFarlane (as modified by Shaffer and Kaish) because both inventions are directed towards utilizing databases on computers.

Bremers's invention would have been expected to successfully work well with McFarlane (as modified by Shaffer and Kaish)'s invention because both inventions use databases. McFarlane (as modified by Shaffer and Kaish) discloses a system for integrating agent database access skills in call center agent assignment applications comprising an agent database and routing calls to the proper agents, however McFarlane (as modified by Shaffer and Kaish) does not expressly disclose wherein synchronizing the routing system is automatically run at a predetermined time interval.

Bremers discloses a merchandising system method and program product utilizing an intermittent network connection comprising synchronizing databases automatically at a predetermined time interval.

It would have been obvious to one of ordinary skill in the art at the time of invention to take the synchronization methods from Bremers and install them into the invention of McFarlane (as modified by Shaffer and Kaish), thereby offering the obvious advantage of reducing the bandwidth on the database of agent skills so as to reduce cost (Bremers, col. 9, lines 35-42).

**Claim 17** encompasses substantially the same scope of the invention as that of Claim 6 in addition to a system and some modules for performing the method steps of Claim 6. Therefore, Claim 17 is rejected for the same reasons as stated above with respect to Claim 6.

**Claim 28** encompasses substantially the same scope of the invention as that of Claim 6 in addition to a computer program on a computer readable medium and some code for performing the method steps of Claim 6. Therefore, Claim 28 is rejected for the same reasons as stated above with respect to Claim 6.



***Conclusion***

16. Any prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is advised that, although not used in the rejections above, prior art cited on any PTO-892 form and not relied upon is considered materially relevant to the applicant's claimed invention and/or portions of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent S. Stace whose telephone number is 571-272-8372 and fax number is 571-273-8372. The examiner can normally be reached on M-F 9am-5:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu M. Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/BRENT STACE/  
Primary Examiner, Art Unit 2161